



# UNITED STATES PATENT AND TRADEMARK OFFICE

HN  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,445	03/08/2001	Nabil M. Lawandy	902.0015USU	6481
29683	7590	03/08/2005	EXAMINER	
HARRINGTON & SMITH, LLP			SONG, HOSUK	
4 RESEARCH DRIVE			ART UNIT	PAPER NUMBER
SHELTON, CT 06484-6212			2135	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/801,445	LAWANDY ET AL.
	<b>Examiner</b> Hosuk Song	<b>Art Unit</b> 2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 December 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-30 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 June 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-6,8-25,27-30 remain rejected under 35 U.S.C. 102(e) as being anticipated by Leon(US 6,701,304).

Claim 1: Leon's patent discloses encoding an object by utilizing discernable physical attributes for encoding information regarding object in (fig.5 and col.2,lines 22-30). Leon discloses utilizing encoded information as at least one element for composing a digital watermark for object in (col.8,lines 14-23).

Claim 2: Leon discloses physical attributes further comprises a set of taggants in association with object, wherein set of taggants is comprised of members having discernable physical attributes predetermined for encoding information regarding object in (col.9,lines 45-52,61-67).

Claim 3: Leon discloses physical attributes comprises at least one of size and shape in (col.9,lines 42-44).

Claim 4: Leon discloses physical attributes comprise at least one of color and emission wavelength in (col.9,lines 18-20,61-65).

Claim 5: Leon discloses physical attributes comprise loading factor in (col.10,lines 1-8).

Claim 6: Leon discloses physical attributes comprise at least one of a radio frequency and a response to a radio frequency in (col.10,lines 2-8).

Claim 8: Leon discloses physical attributes are related to one or more dimensions of object in (col.8,lines 51-56).

Claim 9: Leon discloses detecting encoded information in digital watermark in (col.8,lines 14-23). Leon discloses authenticating object by comparing encoded information with discernable physical attributes of object in (col.13,lines 18-33).

Claim 10: Leon's patent discloses digitally watermarking a barcode in (col.8,lines 51-56;col.9,lines 49-52). Leon discloses associating digitally watermarked barcode with object in (col.12,lines 30-67;col.13,lines 13-33).

Claim 11: Leon discloses encoding additional information into digitally watermarked barcode in (col.8,lines 54-56).

Claim 12: Leon discloses additional information comprises at least one of date of manufacture, a country of origin, and an authorized distribution channel in (col.8,lines 62-65;col.11,table I).

Claim 13: Leon discloses additional information is retrieved from digitally watermarked barcode by use of a key in (col.2,lines 24-39;col.13,lines 34-40).

Claim 14: Leon discloses encoding a key in digitally watermarked barcode such that failure to read a digital watermark in digitally watermarked barcode in an inability to read barcode in (col.13,lines 33-42).

Claim 15: Leon discloses encoding an object by utilizing discernable physical object attributes for encoding information regarding object in (fig.5 and col.2,lines 22-30). Leon discloses utilizing encoded information as a key to retrieve data encoded in a digital watermark associated with object in (col.2,lines 24-39;col.13,lines 34-40).

Claim 16: Leon discloses authenticating object by utilizing data encoded in digital watermark in (col.13,lines 34-42).

Claim 17: Leon discloses a set of taggants in association with object, wherein set of taggants is comprised of members having discernable physical attributes predetermined for encoding information regarding object in (col.9,lines 45-52,61-67).

Claim 18: Leon discloses encoding an object by utilizing discernable physical object attributes for encoding information regarding object in (fig.5 and col.2,lines 22-30). Leon discloses utilizing encoded information as a key to retrieve data encoded in a digital watermark associated with object in (col.2,lines 24-39;col.13,lines 34-40).

Claim 19: Leon discloses encoding a key in digitally watermarked barcode such that failure to read a digital watermark in digitally watermarked barcode in an inability to read barcode in (col.13,lines 33-42).

Claim 20: Leon discloses physical attributes further comprises a set of taggants in association with object, wherein set of taggants is comprised of members having discernable physical attributes predetermined for encoding information regarding object in (col.9,lines 45-52,61-67).

Claim 21: Leon discloses utilizing encoded information as a key to read a digital watermark in digitally watermarked barcode in (col.2,lines 24-39;col.13,lines 34-40).

Claim 22: Leon discloses physical attributes comprises at least one of size and shape in (col.9,lines 42-44).

Claim 23: Leon discloses physical attributes comprise at least one of color and emission wavelength in (col.9,lines 18-20;61-65).

Claim 24: Leon discloses physical attributes comprise loading factor in (col.10,lines 1-8).

Claim 25: Leon discloses physical attributes comprise at least one of a radio frequency and a response to a radio frequency in (col.10,lines 2-8).

Claim 27: Leon discloses physical attributes are related to one or more dimensions of object in (col.8,lines 51-56).

Claim 28: Leon discloses a detector for detecting physical attributes and a digital watermark associated with object in (fig.5). Leon discloses a decoder for decoding information encoded by physical attributes and information included in digital watermark for at one of identifying or authenticating object in (col.13,lines 34-42).

Claim 29: Leon discloses physical attributes further comprises a set of taggants in association with object, wherein set of taggants is comprised of members having discernable physical attributes predetermined for encoding information regarding object in (col.9,lines 45-52,61-67).

Claim 30: Leon discloses a source for illuminating set of taggants, wherein detector detects at least one emission wavelength in response to the illumination in (col.9,lines 16-52).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7,26 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Leon(US 6,269,169).

Claims 7,26: Leon does not specifically disclose physical attributes comprises at least one of magnetic field and a response to a magnetic field. Official notice is taken that physical attributes comprises at least one of magnetic field and a response to a magnetic field is well known in the art. One of ordinary skill in the art would have been motivated to employ magnetic

Art Unit: 2135

field so that taggants can be detected while invisible to the eye thus enhancing security of the object.

***Response to Applicant's Arguments***

3. Applicant has argued that Leon patent at the very least fails to teach or suggest a "digital watermark", as recited in independent method claims 1 and 16, a "digitally watermarked barcode" as recited in independent method claims 10 and 18, and/or "a digitally watermark" as recited in amended apparatus claim 28.

In response: Examiner disagrees. Leon patent specifically disclose digital watermark in col.11,lines 63-67 and TABLE I;Col.12,lines 15-29 where data is encoded with cryptographic algorithm or signed using a particular digital signature algorithm.

Examiner note that digital watermarking is an encryption,which is embedded in an electronic document that is used to identify the ownership or authenticate a document and Leon specifically teaches digital watermarking process in (col.13,lines 35-42) by employing a cryptographic key and a computer system. Leon patent disclose watermarked barcode in (col.8,lines 51-56 and col.11, TABLE I ).

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

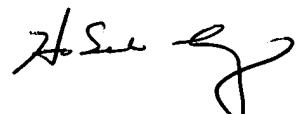
Art Unit: 2135

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 571-272-3857. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature consisting of the letters "H" and "S" followed by a stylized "J".

HS